

Notice of Allowability

Application No.

10/826,788

Examiner

Jon M. Lockard

Applicant(s)

CHIMIENTI ET AL.

Art Unit

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 05 April 2006.
2. ☒ The allowed claim(s) is/are 1, 6, 7, 9, 10, 81, and 82 (renumbered as claims 1, 6, 7, and 2-5, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

**CHRISTINE J. SAOUD
PRIMARY EXAMINER**

Christine J. Saoud

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christina K. Stock on 30 May 2006.

The application has been amended as follows:

2. Claims 2, 11, 12, 60, 81, and 83 have been cancelled without prejudice or disclaimer.
3. In claim 6, the phrase "claim 1" has been deleted and the phrase --claim 1, 9, 10, 80, or 82-- inserted therefor.
4. In claim 7, the phrase "claim 1" has been deleted and the phrase --claim 1, 9, 10, 80, or 82-- inserted therefor.
5. Claim 80. (Amended) A method for treating schizophrenia in a subject suffering therefrom, the method comprising administering to the subject an effective amount of a SLURP-1 polypeptide at least 90% 95% identical to the amino acid sequence of SEQ ID NO:2 and wherein the polypeptide enhances the amplitude of acetylcholine-evoked macroscopic currents, thereby treating schizophrenia in the subject.
6. Claim 82. (Amended) The method of claim 80, ~~comprising administering to the subject an effective amount of a SLURP-1 polypeptide~~ wherein the SLURP-1 polypeptide is at least 99% identical to the amino acid sequence of SEQ ID NO:2.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Freedman et al. (1997). Linkage of a neurophysiological deficit in schizophrenia to a chromosome 15 locus. *Proc. Natl. Acad. Sci. USA*. 94:587-592.

Guan et al. (1999). Decreased protein level of nicotinic $\alpha 7$ subunit in the frontal cortex from schizophrenic brain. *NeuroReport*. 10:1779-1782.

Freedman et al. (1995). Evidence in postmortem brain tissue for decreased numbers of hippocampal nicotinic receptors in schizophrenia. *Biol. Psychiatry*. 38:22-33.

Freedman et al. (2000). The $\alpha 7$ -nicotinic acetylcholine receptor and the pathology of hippocampal interneurons in schizophrenia. *Journal of Chemical Neuroanatomy*. 20:299-306.

Gault et al. (2003). Comparison of polymorphisms in the $\alpha 7$ nicotinic receptor gene and its partial duplication in schizophrenic and control subjects. *American Journal of Medical Genetics Part B (Neuropsychiatric Genetics)*. 123B:39-49.

Simosky et al. (2003). Clozapine improves deficient inhibitory auditory processing in DBA/2 mice, via a nicotinic cholinergic mechanism. *Psychopharmacology*. 165:386-396.

Simosky et al. (2001). Intragastric DMXB-A, an $\alpha 7$ nicotinic agonist, improves deficient sensory inhibition in DBA/2 mice. *Biol. Psychiatry*. 50:493-500.

Stevens et al. (1998). Selective $\alpha 7$ -nicotinic agonists normalize inhibition of auditory response in DBA mice. *Psychopharmacology*. 136:320-327.

O'Neill et al. (2003). DMXB, an $\alpha 7$ nicotinic agonist, normalizes auditory gating in isolation-reared rats. *Psychopharmacology*. 169:332-339.

Grantham et al. (2003). Modulation of alpha 7 nicotinic receptors as a strategy for therapy in schizophrenia. *Schizophrenia Research*. 60(1), Suppl. 1:107.

Martin et al. (2004). Alpha-7 nicotinic receptor agonists: potential new candidates for the treatment of schizophrenia. *Psychopharmacology*. 174:54-64.

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Advisory Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jon M. Lockard, Ph.D.** whose telephone number is **(571) 272-2717**. The examiner can normally be reached on Monday through Friday, 8:00 AM to 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Brenda Brumback**, can be reached on **(571) 272-0961**.

The fax number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Jon M. Lockard, Ph.D.
May 30, 2006

CHRISTINE J. SAOUD
PRIMARY EXAMINER
Christine J. Saoud